

NGDA Dataset Report

Official NGDA Title: Seismic Water Bottom Anomalies - Gulf of Mexico NAD27

Metadata Record Title: Seismic Water Bottom Anomalies - Gulf of Mexico NAD27

A-16 NGDA Theme: Geology

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Metadata:

Registration Status: Complete

Registered on 3/18/2015

GeoPlatform Link*: <https://www.geoplatform.gov/node/243/2f7dcb5a-dd61-4733-a4aa-96bf252e32a4>

Data.gov Metadata Link*: <http://catalog.data.gov/harvest/object/e2253269-0973-40da-8f7a-213793b054da/html>

*If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

NGDA Lifecycle Maturity Assessment (LMA) Report

Time Frame:

Baseline assessment responses include dataset activities from 1998 to 2015.

LMA Submission:

Status: Complete

Date: 9/29/2015

Extension Requested: No

LMA Reviewer(s):

Supervisor: Did not review

Theme Lead: Geology Theme Lead

Executive Champion: Did not review

SAOGI*: Did not review

Other: Did not review

LMA Verifier:

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Attachments:

To get access to any attachments referenced in the report, email the LMA Help Desk at NGDA_LMA_help@fgdc.gov. Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

*Senior Agency Official for Geospatial Information (SAOGI)

Lifecycle Maturity Assessment (LMA) Summary

Overall Maturity:

Mature; Consistent

General Questions: 57%

Managed; Predictable

Stage 1 - Define/Plan: 50%

Managed; Predictable

Stage 2 - Inventory/Evaluate: 100%

Optimized; Established

Stage 3 - Obtain: 100%

Optimized; Established

Stage 4 - Access: 100%

Optimized; Established

Stage 5 - Maintain: 82%

Mature; Consistent

Stage 6 - Use/Evaluate: 89%

Mature; Consistent

Stage 7 - Archive: 100%

Optimized; Established

NGDA Dataset Maturity Definitions:

How To Calculate Maturity: https://www.geoplatform.gov/sites/default/files/How_to_Calculate_Maturity.pdf

Maturity	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Rank = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Rank = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Rank = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Rank = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Rank = 1	Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Rank = no activity	Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

Answer: Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports all lifecycle stages.

Justification Comment:

Attachment(s): 0

Funding for all lifecycle stages of this dataset is part of the core BOEM annual budget. Creation and maintenance of this dataset is an integral and routine portion of the day-to-day activities of the BOEM GOMR Regional Analysis Unit and its allocated funds.

2) Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?

Answer: Process under development.

Justification Comment:

Attachment(s): 0

We have no process for ensuring this dataset conforms to any formal open government or transparency guidelines, though we have created metadata for the dataset which conforms to the NGDA and Geoplatform/Data.gov guidelines.

<http://www.geoplatform.gov/node/243/2f7dcb5a-dd61-4733-a4aa-96bf252e32a4>

3) Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?

Answer: Processes and tools to ensure dataset continuity are under development.

Justification Comment:

Attachment(s): 0

A former employee constructed rudimentary instructions for updating the dataset as needed, but the update steps have since been improved and simplified but have yet to be formally recorded.

STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

Answer: Ad hoc process is used for involving Partners/stakeholders in identifying requirements.

Justification Comment:

Attachment(s): 0

There are no user or business requirements defined which govern the creation process of this dataset, but there are guidelines established in how this dataset effects oil and gas operations in the Gulf of Mexico Outer Continental Shelf. The creation of this dataset was not because any Federal regulations or guidelines demanded it be created, but rather it came about purely out of scientific curiosity.

From NTL 2009-G40 Deepwater Benthic Communities:

"This Notice to Lessees and Operators and Pipeline Right-of way Holders (NTL) supersedes NTL No. 2000-G20, effective December 6, 2000. It broadens the scope to cover all high-density deepwater benthic communities (not just high-density chemosynthetic communities), changes the definition of deepwater from 400 meters (1,312 feet) to 300 meters (984 feet), increases the separation distance from muds and cuttings discharge locations from 1,500 feet to 2,000 feet, provides clarification on conditions of approval, provides for an additional 1,000-foot buffer area beyond maximum anchor areas, no longer prescribes the text of summary statements, adds a guidance document statement and contact information, and makes minor administrative changes.

Under 30 CFR 250.216(a) and 30 CFR 250.247(a), the Minerals Management Service (MMS) Gulf of Mexico OCS Region (GOMR) requires that site-specific information regarding sensitive underwater features (including chemosynthetic communities) accompany each Exploration Plan (EP), Development Operations Coordination Document (DOCD), and Development and Production Plan

(DPP). Under 30 CFR 250.221(a) and 30 CFR 250.252(a), the MMS GOMR also requires that EP's, DOCD's, and DPP's be accompanied by a description of any monitoring systems that will measure environmental conditions or provide data or information on the impact of your proposed activities. Under 30 CFR 250.282, the MMS GOMR may require you to conduct monitoring programs and submit plans and reports."

5) How are partners/stakeholders involved in the requirements collection process?

Answer: Not Applicable (NA).

Justification Comment:
NA

Attachment(s): 0

6) Is there a quality assurance process for the dataset?

Answer: Process identified, early implementation.

Justification Comment:

Attachment(s): 0

The dataset is checked for major errors before new versions are released to the public. The errors checked are making sure that all polygons which need to be closed are closed, that there are no duplicate polygons, and that the geometry of the polygons is reasonable. No documentation exists for this error checking process.

7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?

Answer: Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

Justification Comment:

Attachment(s): 0

This dataset is derivative data from industry-owned seismic surveys. Industry has previously been notified in writing and they have approved release, publication, and reoccurring updates of this data to the public sphere.

8) Are defined data standards used in collecting, processing, and/or rendering the data?

Answer: Standards developed and/or selected.

Justification Comment:

Attachment(s): 0

This dataset is not proprietary. The general standards for creating it are available with the descriptions on the dataset website. <http://www.boem.gov/Oil-and-Gas-Energy-Program/Mapping-and-Data/Map-Gallery/Seismic-Water-Bottom-Anomalies-Map-Gallery.aspx>

Each interpreter whom has a part in this dataset's creation uses his own professional judgement as a geoscientist as to what is considered a seismic "anomaly", so there are no quantitative boundaries on what qualifies.

STAGE 2 - Inventory/Evaluate

9) Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?

Answer: Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

Justification Comment:

Attachment(s): 0

NA. No other source for this dataset either within or outside the BOEM.

STAGE 3 - Obtain

10) Is there a process for obtaining data in relation to this dataset?

Answer: Process is fully implemented, reviewed and updated on a regular basis.

Justification Comment:

Attachment(s): 0

As required by 30 CFR § 580.51, companies are required to send the BOEM their permitted geophysical data, which is then interpreted by geoscientists to create this dataset.

11) Is the metadata in a FGDC endorsed geospatial metadata standard?

Answer: Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and provides all the information required to make the dataset discoverable, accessible, and usable.

Justification Comment:

Attachment(s): 0

FGDC CSDGM, with appropriate keywords.

12) How complete is the geographic coverage as defined in the requirements for the dataset?

Part 1 Answer: Business requirements for cyclic updates identified and a process is in place.

Part 2 Answer: Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

Justification Comment:

Attachment(s): 0

Where resolution is adequate for analysis, analyze the seafloor of the US Gulf of Mexico Outer Continental Shelf on available 3D seismic data. Seismic data typically has a horizontal "XY" resolution of about 50 feet and a vertical resolution of 30 feet. Began creating the dataset in 1998 and is updated as new surveys become available.

STAGE 4 - Access

13) Do you have a process for providing users access to the data in an open digital machine readable format?

Answer: User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

Justification Comment:

Attachment(s): 0

This dataset is available for public download on our website, complete with descriptions. Dataset is updated biannually and is in shapefile and DWG formats for access by geospatial mapping programs such as ArcGIS.

<http://www.boem.gov/Oil-and-Gas-Energy-Program/Mapping-and-Data/Map-Gallery/Seismic-Water-Bottom-Anomalies-Map-Gallery.aspx>

STAGE 5 - Maintain

14) Is there a maintenance process for updating and storing the dataset?

Answer: Dataset maintenance process is fully implemented and processes are reviewed and periodically updated.

Justification Comment:

Attachment(s): 0

Internal dataset is updated almost daily. Updates are released to the public roughly every six months via the BOEM website. Initial, rough dataset is maintained on local servers. Public versions, both old and current, are maintained on BOEM/BSEE Gulf of Mexico region shared hard drive indefinitely.

15) Is there an error correction process as part of dataset maintenance?

Answer: Error correction process established.

Justification Comment:

Attachment(s): 0

Before release to the public, the raw dataset is quality checked for open polygons and duplicate polygons, then the polygons are smoothed to give a cleaner, less jagged appearance. If an end-user finds an error, the process is that they directly contact the dataset creators via phone or email, as can be found in the metadata and on the download website. <http://www.boem.gov/Oil-and-Gas-Energy-Program/Mapping-and-Data/Map-Gallery/Seismic-Water-Bottom-Anomalies-Map-Gallery.aspx>

STAGE 6 - Use/Evaluate

16) Is there a process to determine if the dataset meets user needs?

Answer: Process is complete and being implemented on ad hoc basis.

Justification Comment:

Attachment(s): 0

Process is that end-users, whether internal or external, directly contact dataset creators via phone or email. If the dataset is deficient in any way, the creator contact info is located on the download website and within dataset metadata. <http://www.boem.gov/Oil-and-Gas-Energy-Program/Mapping-and-Data/Map-Gallery/Seismic-Water-Bottom-Anomalies-Map-Gallery.aspx>

17) Is there a process to provide users information on how to access and properly use the dataset?

Answer: Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.

Justification Comment:

Attachment(s): 0

Description of the dataset, its scope, and how to access is available on the download website. <http://www.boem.gov/Oil-and-Gas-Energy-Program/Mapping-and-Data/Map-Gallery/Seismic-Water-Bottom-Anomalies-Map-Gallery.aspx>

18) Are the business processes and management practices assessed to meet changing technology?

Answer: Assessment process is fully implemented for taking advantage of changing technology, process is reviewed on a recurring basis.

Justification Comment:

Attachment(s): 0

As newer and better data coverage becomes available, the dataset is continuously reanalyzed and edited to better represent the geologic classification of the seafloor sites. Collaboration with private and government entities allows us to use the best data available for ground-truthing our dataset whenever possible.

STAGE 7 - Archive

19) Is there an archiving process for the dataset?

Answer: Archival and disposition processes are fully implemented.

Justification Comment:

Attachment(s): 0

Old versions of the dataset are not made available to the public. Once a new version is generated, it is posted to the website and the old one is removed. The old versions are stored on a Gulf of Mexico regional shared hard drive for access by internal users only. This hard drive and all its contents are regularly backed-up. Old versions are archived but remain accessible indefinitely by internal users.